AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 12, line 3 and ending at page 12, line 12 to read as follows:

Figs. 8 and 9 are three-dimensional interferometric images that show the difference between the ~~roughnesses~~ roughness of a grit blasted surface (Fig. 8) and a surface that has been grit blasted and treated by high-pressure water jet (Fig. 9). Fig. 10 is a photomicrograph of the grit blasted surface of a superalloy substrate which is shown to be predominantly flat and planar in nature, on a microscopic level, providing a relatively low volume of surface area for ~~boding~~ bonding with the HVOF coating. In contrast, Fig. 11 is a photomicrograph of the same surface after it has been treated by high-pressure water jet. There is a high degree of "super micro-roughness" which provides a vastly increased amount of surface area for bonding with the HVOF coating. From these images, it is clear that the water jet treatment increases the surface roughness and surface volume of the substrate.

Please amend the paragraph beginning at page 12, line 13, and ending at page 13, line 2 to read as follows:

The following table 1.0 illustrates the increased surface roughness achieved by the water jet surface preparation following grit blasting. The data was obtained using a WYKO NT-2000 vertically scanning interference microscope, which is a non-contact optical profiler. The samples were measured with a 5X magnification objective, which profiles 1.2 mm x .9 mm area with a spatial separation interval of 3.29 microns. As referenced in table 1.0, R_a is the roughness average and is the mean height calculated over the entire measured array. R_q is the root mean square (RMS) roughness or the root mean square average of the measured height deviations taken within the evaluation length or area and measured from the mean linear surface. R_t is the maximum height of the profile which is the vertical distance between the highest and lowest ~~pints~~ points of the surface within the evaluation length. In other words, it is the maximum peak-to-valley height of the profile calculated over the entire measured data array.